



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of

Fumito Nariyuki

Group Art Unit: 1752

Application No. 10/766,939

Examiner: Thorl Chea

Filed: January 30, 2004

Docket No.: FSF-03228-01

For: PHOTOTHERMOGRAPHIC MATERIAL AND IMAGE FORMING METHOD

Honorable Commissioner of Patents and Trademarks

P.O. Box 1450

Alexandria, Virginia 22313-1450

DECLARATION UNDER 37 C.F.R. § 1.132

Sir:

I, Fumito NARIYUKI, do declare and state as follows:

I graduated from Tokyo University with a masters degree in Chemistry in March 2001;

I joined Fuji Photo Film Co., Ltd. (hereinafter, "Fuji") in April 2001, and thereafter, I was engaged in the research and development of photothermographic materials for medical use at Fuji's Ashigara Laboratory until September 2003 and have been engaged in the development of organic electro devices at Fuji's Advanced Core Technology Laboratory (Ashigara) from October 2003 until the present time;

I am the inventor of the subject matter disclosed and claimed in the above-identified application; and

I am familiar with the Office Action of October 18, 2005 and the rejections set forth

therein.

The following additional comparative experiments were carried out by me or under my supervision in order to make the advantages of the subject matter clearer.

Comparative Test

In the comparative test, in a similar manner as in that submitted in the previous Rule 132 Declaration, samples 5a to 8i were prepared in which equivalent coating amounts of compounds disclosed in the Okada patent (see the following Table A) and corresponding adsorbable reducing agents represented by Formula (I) of the present application (see the following Table A) were used in place of additive S-1 of samples 1 to 4 of the present specification. However, the silver halide emulsion of sample 1 was changed to a silver iodobromide emulsion A having an average silver iodide content of 2 mol% in order to match the silver iodide content of the silver halide emulsion used in the Examples of the Okada patent.

Thermal development and evaluation of raw storability were carried out under the same conditions as in Example 1 of the present application, except in that the light exposure times were changed as shown in the following table.

The obtained results are shown in the following Table A. Okada 2, 6, 17, and 20 are compounds used in the Examples of the Okada patent, and Invention 20, 28, 6, 17, and 73 are compounds disclosed in the present specification that correspond to Okada 2, 6, 17, and 20.

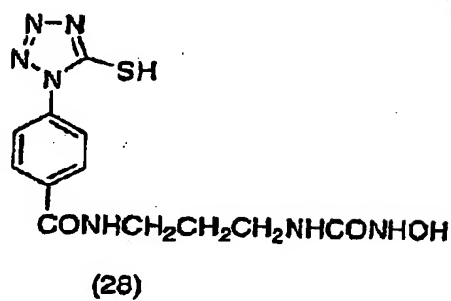
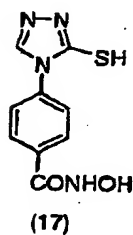
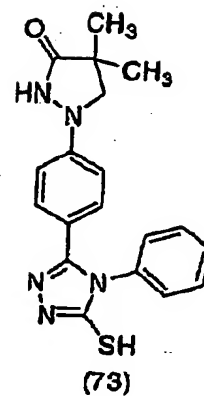
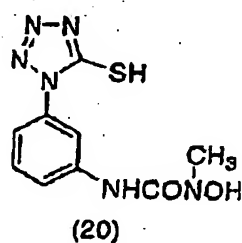
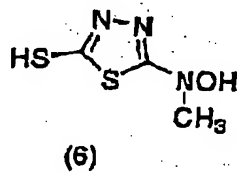
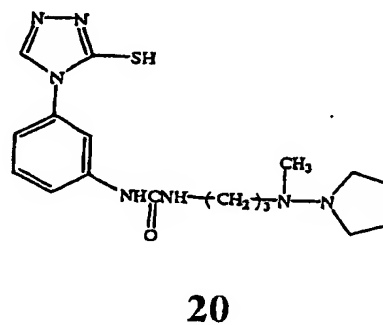
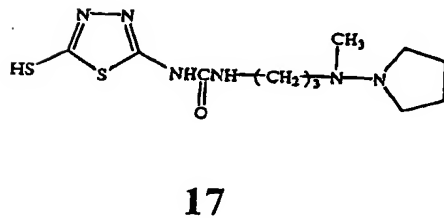
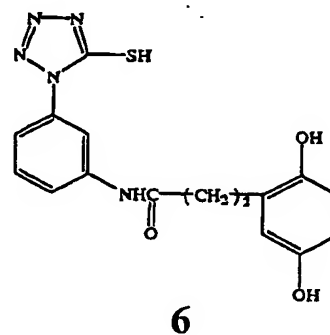
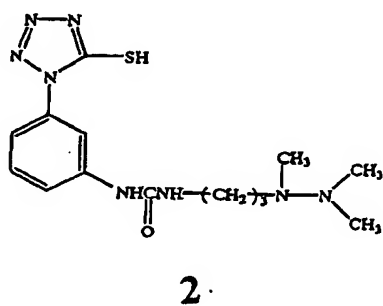
Formulas 6, 17, 20, 28 and 73 of the present invention:**Formulas of 2, 6, 17 and 20 Okada:**

Table A

Sample	Thermal Development Time (sec)	Silver Halide Emulsion	Adsorbable Reducing Agent	Raw Storability	Remark
5a	15	A	Okada 2	86	Comparative
5a	12	A	Okada 2	86	Comparative
6a	15	2	Okada 2	87	Comparative
6a	12	2	Okada 2	89	Comparative
7a	15	3	Okada 2	88	Comparative
7a	12	3	Okada 2	90	Comparative
8a	15	4	Okada 2	88	Comparative
8a	12	4	Okada 2	90	Comparative
5b	15	A	Invention 20	86	Comparative
5b	12	A	Invention 20	86	Comparative
6b	15	2	Invention 20	89	Comparative
6b	12	2	Invention 20	93	Invention
7b	15	3	Invention 20	89	Comparative
7b	12	3	Invention 20	93	Invention
8b	15	4	Invention 20	88	Comparative
8b	12	4	Invention 20	94	Invention
5c	15	A	Okada 6	86	Comparative
5c	12	A	Okada 6	86	Comparative
6c	15	2	Okada 6	87	Comparative
6c	12	2	Okada 6	89	Comparative
7c	15	3	Okada 6	88	Comparative
7c	12	3	Okada 6	90	Comparative
8c	15	4	Okada 6	88	Comparative
8c	12	4	Okada 6	90	Comparative
5d	15	A	Invention 28	86	Comparative
5d	12	A	Invention 28	86	Comparative
6d	15	2	Invention 28	89	Comparative
6d	12	2	Invention 28	93	Invention
7d	15	3	Invention 28	89	Comparative
7d	12	3	Invention 28	93	Invention
8d	15	4	Invention 28	88	Comparative
8d	12	4	Invention 28	94	Invention
5e	15	A	Okada 17	85	Comparative
5e	12	A	Okada 17	85	Comparative
6e	15	2	Okada 17	87	Comparative
6e	12	2	Okada 17	88	Comparative
7e	15	3	Okada 17	88	Comparative
7e	12	3	Okada 17	89	Comparative
8e	15	4	Okada 17	88	Comparative
8e	12	4	Okada 17	89	Comparative
5f	15	A	Invention 6	88	Comparative
5f	12	A	Invention 6	89	Comparative

6f	15	2	Invention 6	90	Comparative
6f	12	2	Invention 6	93	Invention
7f	15	3	Invention 6	90	Comparative
7f	12	3	Invention 6	95	Invention
8f	15	4	Invention 6	90	Comparative
8f	12	4	Invention 6	95	Invention
5g	15	A	Okada 20	86	Comparative
5g	12	A	Okada 20	86	Comparative
6g	15	2	Okada 20	88	Comparative
6g	12	2	Okada 20	89	Comparative
7g	15	3	Okada 20	88	Comparative
7g	12	3	Okada 20	89	Comparative
8g	15	4	Okada 20	88	Comparative
8g	12	4	Okada 20	90	Comparative
5h	15	A	Invention 17	88	Comparative
5h	12	A	Invention 17	89	Comparative
6h	15	2	Invention 17	90	Comparative
6h	12	2	Invention 17	93	Invention
7h	15	3	Invention 17	90	Comparative
7h	12	3	Invention 17	95	Invention
8h	15	4	Invention 17	90	Comparative
8h	12	4	Invention 17	95	Invention
5i	15	A	Invention 73	86	Comparative
5i	12	A	Invention 73	86	Comparative
6i	15	2	Invention 73	90	Comparative
6i	12	2	Invention 73	93	Invention
7i	15	3	Invention 73	90	Comparative
7i	12	3	Invention 73	95	Invention
8i	15	4	Invention 73	90	Comparative
8i	12	4	Invention 73	95	Invention

As is clear from the results shown in Table A, it is understood that, compared with an image forming method in which light exposure is carried out for 15 seconds with respect to a photosensitive material using a silver iodobromide emulsion having a silver iodide content of 2 mol% together with a compound disclosed in the Okada patent, sensitivity reduction in an unexposed photosensitive material during storage is more remarkably suppressed, to an unexpected degree, in the image forming method of the present invention in which light exposure is carried out for 12 seconds with respect to a photosensitive material using a silver halide emulsion having a silver iodide content of 40 mol% or higher together with the adsorbable reducing agent represented by limited Formula (I) of the present application. In other

words, by comparing samples 5a to 8a with samples 5b to 8b, comparing samples 5c to 8c with samples 5d to 8d, comparing samples 5e to 8e with samples 5f to 8f, comparing samples 5g to 8g with samples 5h to 8h and samples 5i to 8i, and by comparing the thermal development time of 15 seconds with that of 12 seconds, it is understood that the image forming method of the present invention in which light exposure is carried out for 12 seconds with respect to a photosensitive material using a silver halide emulsion having a silver iodide content of 40 mol% or higher together with the adsorbable reducing agent represented by limited Formula (I) of the present application is remarkably superior in raw storability, to an unexpected degree.

I further declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true, and further, that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

DATE: March 13, 2006

F. Nariyuki

Fumito NARIYUKI